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MANAGEMENT IN THE AIRLINE INDUSTRY

A Thesis

Presented to

The School of Business Administration
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree of
Master of Business Administration

by

David S. Crooks

May 1975

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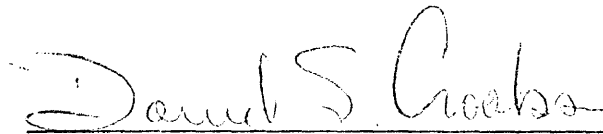
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Author

Approved, May 1975

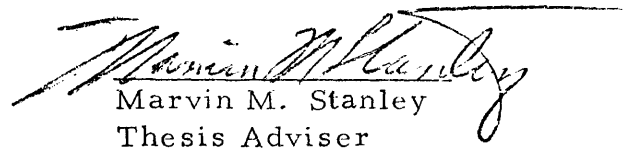

Marvin M. Stanley
Thesis Adviser

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PREFACE

The airline industry today is the leader in commercial inter-city passenger transportation. In achieving this status the industry has evolved through definite eras, beginning about the time of the Great Depression. It is the purpose of this research to define these eras; and for each era to determine the needs of the industry, to categorize the management (as exemplified by the presidents of the industry) into business fields and to evaluate the success of management in light of these needs.

The writer seeks to determine if there is a correlation existing between the needs of the industry, success, and type of management. Further, the writer seeks to evaluate the present and future situation in light of the historical findings, resulting in a forecast for airline management.

DEDICATION

To my wife, Mary, who made this degree possible.

MANAGEMENT IN THE AIRLINE INDUSTRY

Chapter 1

THE NATURE OF THE AIRLINE INDUSTRY

Air transportation is the only truly Twentieth Century mode of domestic transport. Commercial air transportation began on December 4, 1913, when Paul E. Fansler organized the St. Petersburg--Tampa Airboat Line. Scheduled domestic commercial airline service was inaugurated three and one-half weeks later as the airline flew its first passenger across Tampa Bay in Florida.

During the subsequent sixty-one years, the airline industry has evolved into a competitive network of highly sophisticated private operating companies. Two forces have been primarily responsible for this fantastic growth--war and the government.

It was during World War I that the airplane was recognized as a viable instrument of warfare and was therefore developed by the government. Previously, all aircraft development had been by private industry with their rather limited resources. By the end of the war aircraft were becoming sophisticated and dependable, pilots were numerous and highly skilled, and the nation had suddenly become aware of the airplane as a means of transportation.

The government (Post Office Department) began to experiment with airmail service in 1918, with transcontinental airmail service established the following year. The government efforts to maintain a reliable domestic airmail service were at best only moderately

successful. As a result, Congress acted to create the United States airline industry by passing the Contract Air Mail Act (also known as the Kelly Act) in 1925. The act put the transportation of mail by air into private hands by means of competitive bidding for air mail routes. The following year Congress passed the Air Commerce Act which provided for the establishment of airways and navigational aids, the licensing of pilots and aircraft, and the investigation of airplane accidents. While the Air Commerce Act gave the government more control of the newly emerging airline industry, it gave the industry much needed navigational aids and set standards to preserve the industry.

Since 1926 the air mail has been transported solely by private airline companies, with the exception of a disastrous three-month period of government transportation in 1934. However, even though ownership and operation of the industry have been in private hands since 1926, the government has strictly controlled and regulated it.

Early airmail carriers were required by the government to provide facilities for transporting passengers along with the mail. The government hoped that passenger revenues to the airlines would reduce the necessary government subsidies paid to the companies for transporting the mail. It should be noted that the early airline companies were not only dependent upon the government for financial sustenance to operate, but they were dependent on the government for airways too. The federally maintained airways remain today although subsidies are no longer given to the trunklines.

Throughout the 1930s travel by air remained primarily emergency travel where speed was of the utmost importance. Air travel at this point in time was expensive and uncomfortable by the standards of today.

In the 1940s, World War II stimulated aircraft development and again increased awareness of the airplane as a means of transportation. Airline passenger volume increased immensely due to the demands of the war, resulting in prosperity and high earnings to the airline industry. This trend continued after the war because of several factors: The trunklines expanded their route mileage, frequent schedules were offered, equipment became very reliable, and the competitive pressures between airline companies drove fares down.

Development of aircraft continued at a rapid pace even after the war due to the demand for increased passenger capacity as more people began to fly, the demand for increased speed and increased comfort, and the demand for increased flying ranges as routes were expanded and lengthened. By the 1950s the first turbojet aircraft had been put into service and air transportation for the first time was carrying more passengers than any other form of domestic transportation. Also significant in the 1950s is the fact that airlines began carrying freight on a regular basis.

In the 1960s, the pure jets were put into widespread service bringing new dimensions in capacity, speed, comfort, and range in the airline industry. Already in the 1970s the jumbo jet generation has been developed to meet and exceed the growing demands for air

transportation.

Table 1 shows the progress in aircraft development since the 1930s. Table 2 shows the growth of the airline industry since 1926.

Since World War II the aircraft manufacturing industry has seen to it that the airline industry has had all the passenger capacity it has needed--and more. As airline load factors have exceeded the break-even point (resulting in most cases in financial prosperity), the aircraft manufacturers have introduced a bigger and better and more expensive type of aircraft. The competitive pressures forced all the companies in the industry to buy the newest and best aircraft. Purchase of the new aircraft required huge investments which necessitated heavy borrowing by the entire industry. After purchase load factors were always lowered as capacity of the new planes rose (and passenger growth remained near constant), resulting in poor, if any, profits. As load factors passed the break-even point a newer and better aircraft would be introduced and the cycle would start all over again.

There is no doubt that the domestic economic situation has influenced the profits of the airline industry, but the effect seems to be minimal when compared with the effects of the aircraft manufacturing industry. Figure 1 (a graph) demonstrates the relationship between domestic airline industry net profits, the United States' economy, and the introduction of new aircraft.

Many believe the airlines are headed down a path similar to that of the railroads. They cite the constant overcapacity and the

Table 1
Aircraft Development, 1930s through 1970s

Years	Type of plane	Capacity (passenger seats)	Cruising speed (mph)	Normal range (miles)
1930s	DC-3	30	200	2,000
1940s	DC-4, C-46, Constella- tion	50 to 60	250	3,000
1950s	Comet, Electra, DC-6, DC-7, Super Con- stellation	80 to 95	325	4,000
1960s	B-707, CV-880, DC-8	140 to 250	550	5,000
1970s	B-747, DC-10, L-1011	350 to 500	600	6,000

Source:

Taylor, John W. R., ed. Jane's All the World's Aircraft, 1941, 1954-1955, 1966-1967. New York: McGraw Hill Book Co., 1941, 1954-1955, 1966-1967.

Table 2
Domestic Scheduled Airline Industry
Growth--1926 through 1970

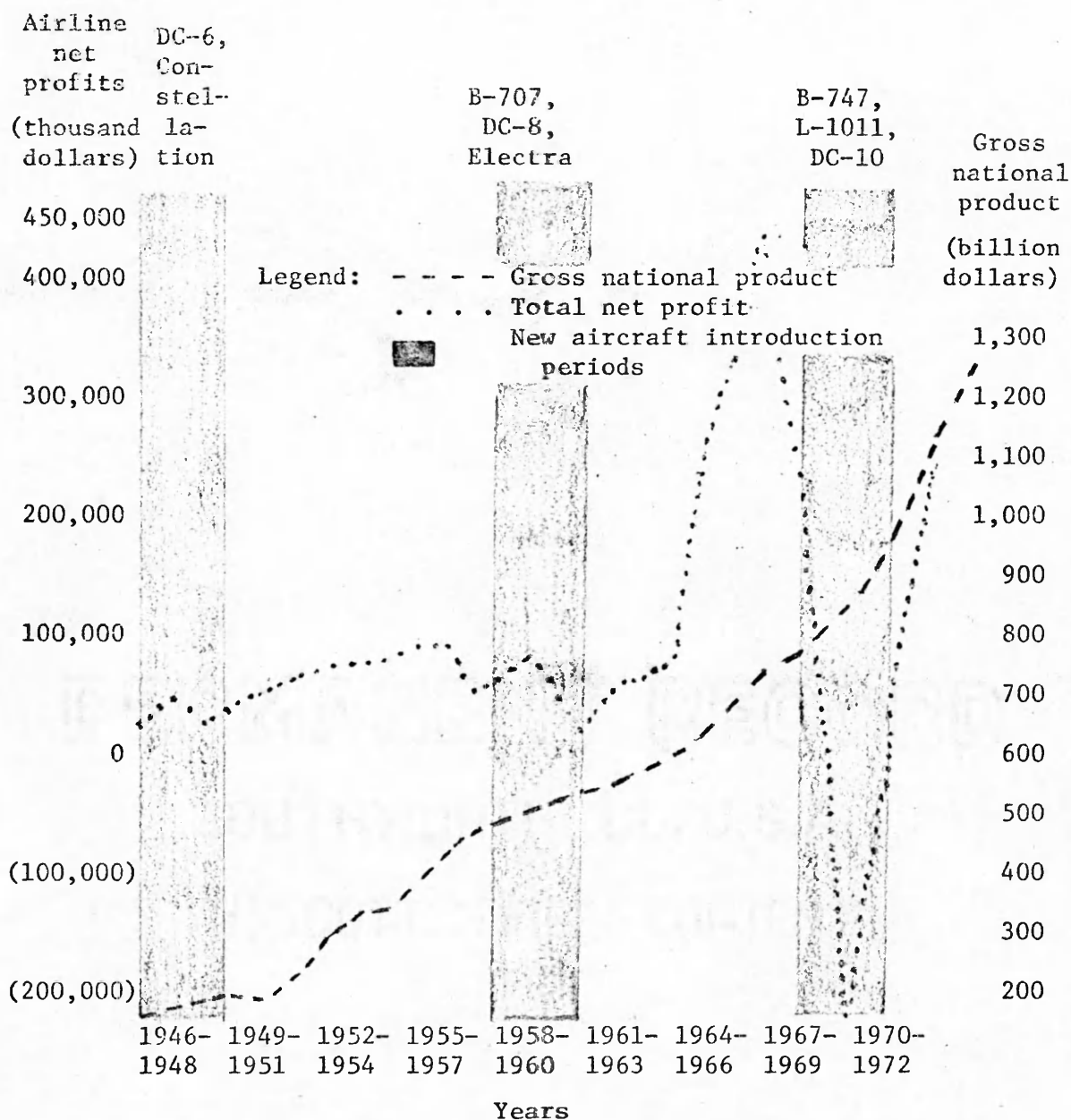
Year	Total revenue passenger miles traveled (thousands)	Total revenue passengers enplaned (thousands)	Total passenger revenue (thousands of dollars)	Total investment (thousands of dollars)
1926	1,272	6	NA ^a	NA
1931	106,442	472	NA	NA
1936	388,242	929	NA	NA
1941	1,377,152	3,849	96,391	63,217
1946	5,903,111	12,164	314,517	262,535
1951	10,210,726	22,711	721,257	375,723
1956	21,643,140	41,937	1,367,367	765,243
1961	29,534,792	52,703	2,214,120	1,988,875
1966	56,802,788	97,746	4,070,635	3,411,305
1970 ^b	104,155,983	153,408	7,066,115	5,000,000

^aNot available.

^bTotal investment for 1970 is an estimate.

Source:

Civil Aeronautics Board. "Handbook of Airline Statistics,"
1971 Edition. Washington, D.C.: N.p., 1971. [Booklet.]



Sources:

Air Transport Association of America. "Air Transport 1974." Washington, D.C.: N.p., 1974. [Booklet.]

Golenpaul, Don, ed. "Information Please Almanac," 1946 through 1974. New York: Simon and Schuster. [Booklet.]

Figure 1. Comparison of Gross National Product (GNP), Airline Industry Net Profits, and New Aircraft Introduction.

high debt equity ratio occasioned by reequipment cycles as justification. Stifling regulation is also cited as a contributing factor.

Ever since the passage of the Contract Air Mail Act and the Air Commerce Act, Congress has strictly regulated the airline industry through the Civil Aeronautics Board (CAB). While the legislation was originally designed to be promotional, i.e., to encourage and preserve the new industry, subsequent legislation has been regulatory and almost to the point of being oppressive. Today the government regulates routes; aircraft design, operation, and maintenance; flight personnel; navigation and airways; fares; safety and accident investigation; ticket issuance; airports; and airline facilities.

Regulation is so complete that an airline operating an unprofitable route must continue to operate it with the same fare unless through the long and tedious process of administration review it can show that there is no "public convenience and necessity" being served in operating the route or that the fare is less than "just and reasonable." The burden of proof is on the airline making the airline point of view very difficult to establish beyond "a preponderance of the evidence."

Two federal administrative agencies deal exclusively with the airlines: The Federal Aviation Administration (FAA) regulates operations and routes and provides technical supervision to the airlines; and the Civil Aeronautics Board is charged with the economic regulation and promotion of the airlines. It should be noted that the airlines are the only mode of transportation which Congress has

specifically legislated to promote. However, the legislation also provides that the airlines are to be competitive with other modes of transportation, taking into account the inherent advantages of each mode.

Chapter 2

DEFINITION OF ERAS IN AIRLINE

INDUSTRY GROWTH

The United States' domestic airline industry has progressed through definite eras in its growth. These eras may be defined as the early years, the growth years, and the crisis years.

The early years are characterized by the dependency of the airline companies on mail contracts for existence, primitive aircraft, the high cost and discomfort of passenger air travel, the monopolistic route structure, and a management by people with an operational background. The era commences with the beginning of commercial aviation in 1913 and extends up to the outbreak of World War II.

During this period passenger travel was light, although air mail service flourished. Aircraft were small, slow, uncomfortable, and could fly only short ranges. Many of the aircraft were designed to carry mail and passenger seats were an afterthought.

Although air mail routes were bid for on a competitive basis, there was only one route between any two cities. Hence, once the airline company got a route, it had a monopoly (no other company could carry mail over that route and it was financially impossible for an airline to exist carrying only passengers). Management of these young companies usually doubled as pilots and, in some cases, even as mechanics. This was the era of Eddie Rickenbacker (Eastern Air Lines),

Juan Trippe (Pan American World Airways), and William Patterson (United Air Lines).

What is dubbed the growth era begins at the outbreak of World War II and runs up until the beginning of the jet age, roughly 1960. This era is characterized by huge passenger growth, greatly enlarged and improved aircraft, lower fares, and competition on routes.

World War II stimulated the development of aircraft and the airplane as a means of mass passenger transportation. The more highly developed and efficient aircraft permitted the lowering of fares. This factor, accompanied with a growing awareness of air travel, stimulated passenger traffic. New legislation created competition on the major air routes now that mail contracts were not the bread and butter of the industry. Management became oriented toward marketing as passenger traffic grew, aircraft capacity was enlarged, and competition between airlines over the same routes became keen.

The crisis era begins with the outset of the jet age and runs up to the present. The crisis refers to the financial situation of the airline companies. During this period the debt to equity ratios of the airlines began to skyrocket to the point where, at the present, they approach the debt to equity ratios of the railroads.

The crisis was brought about by the introduction of pure jet aircraft. The new jet aircraft required a huge initial investment, a large investment in spare parts, and an additional investment in ground equipment and facilities to accommodate the new type of aircraft. This huge financial outlay came about at a time when the

United States economy was sluggish. Further, the new planes had a much larger passenger capacity than the old propeller planes, raising the number of passengers required on a flight to break even (although load factor break-even points were lowered).

About the time the airlines began to recover from the effects of breaking into the jet age, the jumbo jet age, or wide-body jet age, began with the introduction of the Boeing 747. This created the whole financial crisis all over again. This most recent financial crisis is being further complicated by the energy crisis and the current recession. As this is being written, May, 1975, at least two major United States carriers are potential candidates for bankruptcy--Pan American World Airways and Eastern Air Lines. The crisis era is characterized also by new horizons in aircraft speeds, comfort, and ranges.

Chapter 3

EDUCATION AND EXPERIENCE OF SELECTED AIRLINE COMPANY PRESIDENTS

On the following pages the education and experience of the past and present airline company presidents are analyzed. Those airlines whose presidents are considered include the major trunk carriers of the United States, i.e., American Airlines, Braniff Airways, Continental Airlines, Eastern Airlines, Delta Airlines, National Airlines, Northwest Airlines, Pan American World Airways, Trans World Airlines, and United Airlines. In each case every president of the airline is examined from the incorporation of the company until the present.

An attempt is made to classify each president by the primary emphasis of his occupational experience prior to his becoming an airline president. A president's educational background is also considered where it is known, but to a lesser degree than his occupational experience. The writer has concluded from his research that educational background, where known, has had little apparent influence on the career of airline presidents, but rather the primary influence has been one's occupational background.

The classification used on the succeeding pages is as follows:

1. Little or no business background. The president started his position with practically no business experience and in

most cases started the airline company as his first business experience.

2. General business background. The president had no specific training or experience in any particular specialized area of business but had worked in various areas of business at the time he took over his position as president. The presidents of this category have, in most cases, had broad managerial experience in undefined or multiple areas of business.

3. Financial background. The president has had his predominant experience in the financial aspects of business.

4. Marketing background. The president has had his predominant experience in the marketing and sales aspects of business.

5. Personnel background. The president has had his predominant experience in the field of personnel.

6. Military background. The president has had his predominant experience with the United States Armed Forces.

7. Operational background. The president has had his predominant experience in the operational aspects of business.

8. Legal background. The president has had his predominant experience in the practice of law, including private, corporate, and administrative practice.

9. Unknown background. The researcher was unable to obtain enough information as to the president's education and experience to make a judgment as to one of the other classifications.

AMERICAN AIRLINES

Chronology of Presidents

Cyrus R. Smith	1934-1942
Ralph Damon	1945-1949
Cyrus R. Smith	1949-1964
Marion Sadler	1964-1968
George A. Spater	1968-1972
G. A. Warde	1972-1974
Albert V. Casey	1974-

Cyrus R. SmithEducation

BBA, University of Texas

Experience

Commercial pilot (although never flew professionally)

Bank teller

Bookkeeper at cotton mill

Public accountant

Junior officer, public utility company

Treasurer, Texas Air Transport, Inc.

Vice President, Texas Air Transport, Inc.

Vice President, Southern Air Transport, Inc.

Vice President of Operations, American Airlines

Deputy Commander, Air Transport Command, U.S. Air Force

President, American Airlines

Classification: 2.

Ralph S. Damon

Education

AB, Harvard

Experience

Factory superintendent, Curtiss Aeroplane and Motor Co.

President, Curtiss Aeroplane and Motor Co.

Vice President and factory manager, Curtiss Robertson
Airplane Mfg. Co.

Assistant to the executive Vice President, Curtiss
Wright Corp.

Vice President and general manager, Curtiss Wright
Airplane Co.

President, Curtiss Wright Airplane Co.

Vice President and factory manager, Keystone Aircraft
Corp.

Vice President--Operations, American Airlines

President, Republic Aviation

Vice President and general manager, American Airlines

President, American Airlines

President, Trans World Airlines

Classification: 2.

Marion SadlerEducation

AB, Duke University

MA, Duke University (English major)

Experience

Teacher

District sales manager, American Airlines

Director of Passenger Sales, American Airlines

Vice President--customer service, American Airlines

Vice President and general manager, American Airlines

President, American Airlines

Classification: 4.

George A. Spater

Education

AB, University of Michigan

JD, University of Michigan

Experience

Lawyer; Chadbourne, Park, Whiteside, & Wolff; New York

City

Executive Vice President and general counsel, American

Airlines

Vice Chairman, American Airlines

President, American Airlines

Classification: 8.

G. A. Warde

Education

Attended University of Alabama

Attended Hofstra College

Experience

Foreman, American Export Airlines

Superintendent--line maintenance, Pan American World

Airways

Production manager--California, Eastern Airlines

Apprentice mechanic, American Airlines

General production manager, American Airlines

Vice President--maintenance, American Airlines

Vice President--maintenance and engineering, American

Airlines

Senior Vice President--operations, American Airlines

President, American Airlines

Classification: 2.

Albert V. CaseyEducation

AB, Harvard

MBA, Harvard

Experience

Assistant Vice President--finance, Southern Pacific
Railroad

Vice President--finance, Southern Pacific Railroad

Assistant treasurer, Southern Pacific Railroad

Vice President--finance, Railroad Express Agency

Vice President--finance, Times Mirror Co. (newspaper
publisher)

Executive Vice President, Times Mirror Co.

President, Times Mirror Co.

President, American Airlines

Classification: 3.

BRANIFF AIRWAYS

Chronology of Presidents

Tom E. Braniff	1930-1954
Charles E. Beard	1954-1964
Harding L. Lawrence	1965-1970
C. Edward Acker	1970-

Thomas E. Braniff

Education

Two years of high school

Experience

Insurance agent

Owner, Braniff Investment Co.

Owner, President and Chairman of the board, Prudential
Fire Insurance Co.

President, Braniff Airways

Classification: 2

Charles E. BeardEducation

Attended Lake Forest College

Attended University of Toledo

Experience

Newspaper reporter

Professional theatre actor on Broadway

Owner, heavy hardware and implement business

Secretary and manager, Chicago Air Traffic Association

Passenger traffic manager, Northwest Orient Airlines

General traffic manager, Braniff Airways

Vice President--traffic and sales, Braniff Airways

Executive Vice President, Braniff Airways

President, Braniff Airways

Classification: 4

Harding L. LawrenceEducation

BBA, University of Texas

LLB, South Texas College of Law

Experience

Assistant to the Vice President--Operations, Pioneer
Air Lines

General sales manager and Vice President--sales,
Pioneer Air Lines

Vice President--traffic and sales, Pioneer Air Lines
Executive Vice President--traffic and sales, Continental
Airlines

Executive Vice President, Continental Airlines
President, Braniff Airways

Classification: 4

C. Edward AckerEducation

BA, Southern Methodist University (major in economics
and psychology)

Experience

Stock broker

Vice President, Lionel D. Edie & Co. (investment
counsel and economic consultants)

Vice President--finance, Greatamerica Corp.

Senior Vice President--planning and administration,
Braniff Airways

Executive Vice President and general manager, Braniff
Airways

President, Braniff Airways

Classification: 2

CONTINENTAL AIRLINES

Chronology of Presidents

Robert F. Six

1938-

Robert F. Six

Education

High school

Experience

Pilot

Owner and operator, Valléy Flying Service

District circulation manager, "San Francisco Chronicle"

Coowner, Mouton and Six (aircraft distributors)

General manager, Varney Speed (air) Lines

President, Continental Airlines

Classification: 7

DELTA AIR LINES

Chronology of Presidents

D. Y. Smith	1928-1934
C. E. Faulk	1934-1945
C. E. Woolman	1945-1965
C. H. Dolson	1965-1970
W. T. Beebe	1970-1971
David C. Garrett, Jr.	1971-

D. Y. Smith

Education

Experience

Classification: 9

C. E. Faulk

Education

Grammar school

Experience

Owner, Monroe News Star Publishing Co.

Owner and publisher; Longview, Texas, "News and Journal"

President, Delta Air Lines

Classification: 2

C. E. Woolman

Education

BS, University of Illinois (major in agricultural engineering)

Experience

County agricultural agent, Shreveport, Louisiana

District agricultural agent, northern Louisiana

Vice President and field manager, Huff, Dalund Dusters
(crop dusting company)

Vice President and general manager, Huff, Dalund
Dusters

Vice President and general manager, Delta Air Lines

President, Delta Air Lines

Classification: 2

C. H. Dolson

Education

BS, Washington University (civil engineering major)

Experience

Test pilot, Curtiss-Wright Airplane Co.

Pilot, American Airlines'

Pilot, Delta Air Lines

Chief pilot, Delta Air Lines

Operations manager, Delta Air Lines

Vice President--operations, Delta Air Lines

Executive Vice President--operations, Delta Air Lines

President, Delta Air Lines

Classification: 7

William T. Beebe

Education

BBA, University of Minnesota

Experience

College trainee, General Electric Co.

Personnel manager, United Aircraft Corp.

Vice President--personnel and labor relations, Chicago
and Southern Air Lines

Vice President--personnel, Delta Air Lines

Senior Vice President--administration, Delta Air Lines

President, Delta Air Lines

Classification: 5

David C. Garrett, Jr.

Education

BA, Furman University

MS, Georgia Institute of Technology

Experience

Worked in the marketing division of Delta Air Lines

Director--methods and training department, Delta Air
Lines

Director--planning and coordination of jet introduction
program, Delta Air Lines

Assistant of the executive Vice President--operations,
Delta Air Lines

Assistant Vice President--operations, Delta Air Lines

Vice President--operations, Delta Air Lines

Senior Vice President--operations, Delta Air Lines

President, Delta Air Lines

Classification: 7

EASTERN AIR LINES

Chronology of Presidents

Edward V. Rickenbacker	1938-1953
Thomas F. Armstrong	1954-1958
Malcolm A. MacIntyre	1959-1963
Floyd D. Hall	1963-1967
Arthur D. Lewis	1968-1970
Samuel L. Higginbottom	1970-1973
Floyd D. Hall	1973-

Edward V. Rickenbacker

Education

Experience

Pilot

President, Rickenbacker Motor Co. (automobile
manufacturing)

Vice President and director of sales, General Aviation
Manufacturing Co.

Vice President, American Airways

Vice President, North American Aviation, Inc.

General manager, Eastern Air Lines

President, Eastern Air Lines

Classification: 2

Thomas F. Armstrong

Education

Experience

Secretary, Eastern Air Lines

Treasurer, Eastern Air Lines

President, Eastern Air Lines

Classification: 2

Malcolm A. MacIntyreEducation

BA, Yale

BA, Oxford

JD, Yale

Experience

Various legal jobs with law firms

Corporate counsel, American Airlines

Under-secretary of the U.S. Air Force

Assistant secretary of defense

President, Eastern Air Lines

Classification: 8

Floyd D. Hall

Education

BS, University of Colorado

MBA, University of Michigan

Experience

Various management positions at Trans World Airlines

General manager--U. S. operations, Trans World Airlines

Vice President--flight operations, Trans World Airlines

Vice President and general transportation manager,

Trans World Airlines

Senior Vice President and system general manager,

Trans World Airlines

President, Eastern Air Lines

Classification: 7

Arthur D. LewisEducation

Student, University of Texas

Student, Harvard

Experience

Manager of economic analysis, American Airlines

Director of economic planning, American Airlines

Assistant Vice President--planning, American Airlines

Executive Vice President, Hawaiian Airlines

President, Hawaiian Airlines

Senior Vice President and general manager, Eastern Air

Lines

President, Eastern Air Lines

Classification: 2

Samuel L. Higginbottom

Education

BS, Columbia University (major in civil engineering)

Advanced management training program, Harvard

Business School

Experience

Design engineer

Various supervisory positions, Trans World Airlines

Vice President--engineering, flight test, and
inspection, Trans World Airlines

Vice President--operations group, Eastern Air Lines

Senior Vice President--engineering and maintenance,
Eastern Air Lines

President, Eastern Air Lines

Classification: 2

NATIONAL AIRLINES

Chronology of Presidents

George T. Baker	1934-1962
L. B. Maytag, Jr.	1962-

George T. Baker

Education

High school

Experience

Pilot

Owner of aircraft charter service

President, National Airlines

Classification: 7

L. B. Maytag, Jr.

Education

BBA, Colorado College

Experience

Founded Maytag Aircraft Corp. (flight school, private
aircraft maintenance)

Licensed pilot with commercial rating

President, Frontier Airlines

President, National Airlines

Classification: 2

NORTHWEST ORIENT AIRLINES

Chronology of Presidents

Croil Hunter	1933-1954
Donald W. Nyrop	1954-

Croil HunterEducation

BA, Yale

Experience

Pilot

Treasurer, Fargo Mercantile Co.

New York manager, First Banccredit Corp.

Traffic manager, Northwest Orient Airlines

Vice President and general manager, Northwest Orient

Airlines

President, Northwest Orient Airlines

Classification: 2

Donald W. Nyrop

Education

AB, Doane College

LLB, George Washington University

Experience

Private law practice

Attorney general counsel's office, Civil Aeronautics

Board

Executive officer to the chairman, Civil Aeronautics

Board

Deputy administrator for operations, Civil Aeronautics

Board

Administrator, Civil Aeronautics Board

Chairman, Civil Aeronautics Board

President, Northwest Orient Airlines

Classification: 8

PAN AMERICAN WORLD AIRWAYS

Chronology of Presidents

Juan T. Trippe	1927-1964
Harold E. Gray	1964-1968
Najeeb E. Halaby	1968-1971
William T. Seawell	1971-

Juan T. Trippe

Education

BA, Yale

Experience

President, Long Island Airways

Managing director, Colonial Air Transport

Pilot

President, Pan American World Airways

Classification: 7



Harold E. Gray

Education

BS, University of Detroit (major in mechanical engineering)

Experience

Pilot, Ford Motor Co.

Pilot, Pan American World Airways

Chief pilot--Atlantic division, Pan American World Airways

Operations manager, Pan American World Airways

Division manager--Pacific and Alaska division, Pan American World Airways

Vice President--Pacific and Alaska division, Pan American World Airways

Executive Vice President--Atlantic division, Pan American World Airways

Executive Vice President--overseas division, Pan American World Airways

President, Pan American World Airways

Classification: 2

Najeeb E. Halaby

Education

AB, Stanford

LLB, Yale

Postgraduate work, University of Michigan Law School

Experience

Lawyer, O'Melveny and Myers, Los Angeles

Production test pilot, Lockheed Aircraft Corp.

Foreign affairs advisor to the secretary of defense

Deputy assistant secretary of defense

Vice President, Servomechanisms, Inc.

Executive Vice President, Servomechanisms, Inc.

President, American Technical Corp.

Vice President, Janass Corp.

Professor, University of California--Los Angeles

Administrator, Federal Aviation Administration

President, Pan American World Airways

Classification: 2

William T. SeawellEducation

BS, U. S. Military Academy

LLB, Harvard

Experience

Brigadier general, U. S. Air Force

Deputy secretary of defense

Vice President--operations and engineering, Air Transport

Association of America

Vice President--operation planning, American Airlines

Vice President--flight, American Airlines

Senior Vice President--operations, American Airlines

President, Rolls Royce Aero Engines, Inc.

President, Pan American World Airways

Classification: 7

TRANS WORLD AIRLINES

Chronology of Presidents

H. M. Hanshue	1930-1931
Richard W. Robbins	1931-1934
Jack Frye	1934-1947
LaMotte T. Cohu	1947-1948
Ralph S. Damon	1949-1956
Carter L. Burgess	1957-1957
Charles S. Thomas	1958-1960
Charles C. Tillinghast, Jr.	1961-1969
F. C. Wiser, Jr.	1969-

Harris M. Hanshue

Education

Experience

Race car driver

Car dealer

President, Western Air Express

President, Trans World Airlines

Classification: 1

Richard W. Robbins

Education

Experience

Classification: 9

Jack FryeEducation

High school

Experience

Pilot

Vice President, Aero Company of California

President, Aero Company of California

Vice President--operations, Western Air Express Corp.

Vice President--operations, Transcontinental and
Western Air, Inc.

President, Transcontinental and Western Air, Inc.

President, Trans World Airlines

Classification: 7

LaMotte T. Cohu

Education

AB, Princeton

Experience

Security salesman

President, Air Investors, Inc.

President, Aviation Corp.

President, North American Aviation, Inc.

Chairman of the Board and general manager, Northrop
Aircraft, Inc.

President, Trans World Airlines

Classification: 2

Ralph S. Damon

Education

AB, Harvard

Experience

Factory superintendent, Curtiss Aeroplane and Motor Co.

President, Curtiss Aeroplane and Motor Co.

Vice President and factory manager, Curtiss Robertson
Airplane Mfg. Co.

Assistant to the executive Vice President, Curtiss
Wright Corp.

Vice President and general manager, Curtiss Wright
Airplane Co.

President, Curtiss Wright Airplane Co.

Vice President and factory manager, Keystone Aircraft
Corp.

Vice President--operations, American Airlines

President, Republic Aviation

Vice President and general manager, American Airlines

President, American Airlines

President, Trans World Airlines

Classification: 2

Carter L. Burgess

Education

BA, Virginia Military Institute

Experience

Assistant to the President, Trans World Airlines

Director of administration, General Aniline and Film

Corp.

Assistant to the President, University of South

Carolina

Assistant secretary, U. S. Department of Defense

President, American Machine and Foundry Co.

President, Trans World Airlines

Classification: 2

Charles S. ThomasEducation

Attended University of California

Attended Cornell University

Experience

Under secretary of the Navy

Assistant secretary of defense for supply and logistics

Secretary of the Navy

President, Trans World Airlines

Classification: 6

Charles C. Tillinghast, Jr.Education

BA, Brown University

LLB, Columbia Law School

Experience

Lawyer; Hughes, Schurman & Dwight; New York City

Deputy assistant attorney general, New York County

Vice President--international operations, Bendix Corp.

President, Trans World Airlines

Classification: 8

F. C. Wiser, Jr.

Education

BS, U. S. Naval Academy

MBA, Harvard

Experience

Assistant to executive Vice President, Container
Corporation of America

Vice President, Pittsburgh Standard Conduit Co.

Assistant to Vice President--operations planning,
American Airlines

Vice President--operations, American Airlines

Vice President--technical services, American Airlines

President and chief executive officer, Northeast
Airlines

President, Trans World Airlines

Classification: 2

UNITED AIR LINES

Chronology of Presidents

William A. Patterson	1934-1963
George E. Keck	1963-1971
Edward E. Carlson .	1971-1974
Richard J. Ferris	1974-

William A. PattersonEducation

High school

Experience

Associated with Wells Fargo Bank, San Francisco

Assistant to President, Boeing Air Transport

Vice President, United Air Lines

President, United Air Lines

Classification: 2

George E. Keck

Education

BS, University of Illinois

Experience

Acting plant manager, Owens--Illinois Can Co.

Work analyst--industrial engineering department,

United Air Lines

Director--industrial engineering department, United Air

Lines

Vice President--base maintenance, United Air Lines

Executive Vice President--operations, United Air Lines

Executive Vice President and general manager, United

Air Lines

President, United Air Lines

Classification: 2

Edward E. CarlsonEducation

Attended University of Washington

Experience

Manager, President Hotel, Mt. Vernon, Washington

Manager, Rainier Club, Seattle

Vice President, Western Hotels, Inc.

Executive Vice President, Western Hotels, Inc.

President, Western Hotels, Inc.

Chairman of the Board, Western Hotels, Inc.

President, United Air Lines

Classification: 2

Richard J. Ferris

Education

Experience

Associated with Western International Hotels

President, DAL, Inc. Food Services Division

Group Vice President--marketing services, United

Air Lines

President, United Air Lines

Classification: 2

Chapter 4

NEEDS OF THE AIRLINE INDUSTRY BY ERA

During each of the eras defined previously, the airlines suffered a multitude of growing pains. The growing pains referred to are those of an industry-wide nature, occasioned by external forces. Those problems that were specific to only one or several carriers are not considered.

Competition in the airline industry has been keen ever since the Civil Aeronautics Act of 1938, forcing an airline company to either fall by the wayside (go out of business or merge, in most cases) or keep its position in the industry relative to the other carriers. As a result, the air carriers in existence today have "grown up" together and faced similar problems along the way. The following pages will analyze these problems by era.

During the early years of the airline industry, aircraft were crude, unreliable, and of a multitude of varieties; navigational equipment and airports were almost unknown; and pilots had little formal training in their occupation, if any. The major emphasis of the early years was in overcoming these problems and the major needs of this era were, therefore, of an operational nature.

Aircraft needed more standardization, more efficiency, and more dependability. An airline with two of the same type aircraft was indeed an exception. Parts were a constant problem as was maintenance

of such a variety of aircraft.

Navigational equipment and airports were a major stumbling block to the airlines due to the huge investment required. The airlines were struggling as it was to make a profit and lacked the additional capital to build airports or navigational systems along their routes.

Pilots needed to be a jack of all trades--mechanic, navigator, and weather forecaster. In addition they needed the ability to fly a variety of different aircraft types and to be able to pick a good hard landing field. The pilots of this era were for the most part barnstormers turned professionals.

As a result of this situation, accidents were frequent and service unreliable. Further, the expense incurred by the inefficiencies of these early operations forced many airlines out of business.

Until World War II, the airline industry had little organization--even the individual airline companies had little organization. However, with the tremendous growth in passenger demand occasioned by the war, organization became a necessity. Legislation was enacted during this period which furthered the organization and preservation of the industry. For the first time the government set standards for aircraft, maintenance, pilots, safety and service. Later, fares and the financial structure of the individual companies were also regulated.

By this time routes had become competitive and to compete

successfully a company needed to become more efficient in its operations. The problems of organization became bigger as the companies grew in size and newer, faster, and bigger aircraft were introduced.

The faster and larger airplanes required paved runways to land on and needed accurate methods of navigation to find the airports. No longer could an airplane land in a cow pasture. Further, the increase in passenger traffic required central collection points for the traveling public. It was the government who finally took over these problems in that the airline industry lacked the necessary capital and organization to overcome them.

The basic need, therefore, during the growth era was for organization by the industry to cope with the multitude of growing pains that were common to the industry and bigger than any of the individual airline companies.

As the airlines began to refurbish their fleets and complementary ground facilities during the early 1960s, it became necessary to raise huge quantities of capital. Wide swings in earnings had made it difficult for most carriers to go to the equity market for the needed additional capital. At the same time, sources for long-term debt became more scarce as returns from operations dwindled. The orientation of the entire industry at this point was how to pay for all the new aircraft and equipment that was about to be delivered.

This situation was further complicated by an economic recession which decreased air travel and also revenues. And at the same time government regulation of the airline industry had grown to the point

where it was stifling the alternatives available to the airline companies. In summary, the major need during the crisis era was for capital to finance the continued growth of the airline industry.

Chapter 5

SUCCESS OF THE AIRLINE INDUSTRY BY ERA

In considering the success of the airline industry one must take into account not only the operating results, but also the growth achieved. In Table 3 the operating results of the total domestic trunk airline industry of the United States are compared from 1926 to 1974. In Table 4 the growth of the total domestic trunk airline industry of the United States is compared from 1938 to 1974.

To summarize these tables, in the early years profits were small as operations were inefficient, passenger travel was slight, and the companies had to exist from their government mail subsidies. As passenger traffic began to slowly increase and new mail routes were awarded, there was some significant growth.

In the "growth era" growth was the major factor. The individual airline companies were competitive for the first time during this period and their competitive efforts stimulated passenger travel immensely. Profits fluctuated widely depending upon new aircraft introductions and the domestic economic climate. The operating results of the airline industry have always reflected the economic situation of the country, i.e., when the economy was booming, profits were soaring and when the country experienced a recession, profits were significantly decreased. As mentioned earlier, the introduction of a new type of airplane always reflected adversely on the income

Table 3
Operating Results--Total United States'
Domestic Trunk Airlines

Year	Operating profit (hundred thousands of dollars)	Total investment (hundred thousands of dollars)	Rate of return on total investment (%)
1938	(1.1) ^a	30.2	
1939	4.6	35.8	
1940	5.9	54.5	
1941	7.3	61.9	
1942	26.0	76.7	
1943	27.0	96.1	
1944	36.1	126.9	
1945	33.5	168.1	
1946	(5.2)	257.0	
1947	(20.9)	299.4	(4.65)
1948	2.1	319.1	2.65
1949	24.6	321.2	5.91
1950	62.6	335.7	12.09
1951	105.9	353.2	13.44
1952	95.1	417.4	14.19
1953	88.4	486.2	11.22
1954	99.5	522.5	11.21

Table 3 (continued)

Year	Operating profit (hundred thousands of dollars)	Total investment (hundred thousnads of dollars)	Rate of return on total investment (%)
1955	122.6	589.9	11.85
1956	100.6	711.2	9.57
1957	42.1	903.7	4.80
1958	95.1	1,066.9	6.49
1959	105.2	1,320.7	7.12
1960	34.9	1,579.6	2.79
1961	11.1	1,829.3	1.00
1962	74.9	1,963.7	3.72
1963	129.2	1,919.3	4.02
1964	296.8	2,033.8	9.62
1965	416.2	2,369.3	12.04
1966	453.7	3,044.7	10.36
1967	410.1		6.90
1968	320.1		4.90
1969	304.4		4.30
1970	14.8		1.40
1971 ^b	229.5		3.30
1972 ^b	434.1		5.10
1973 ^b	413.9		4.70

Table 3 (continued)

Year	Operating profit (hundred thousands of dollars)	Total investment (hundred thousands of dollars)	Rate of return on total investment (%)
1974 ^b	679.4		7.80

^aParentheses indicate deficit.

^bIncludes statistics for Alaska and Hawaii.

Sources:

Civil Aeronautics Board. "Handbook of Airline Statistics," 1971 Edition. Washington, D.C.: N.p., 1971. [Booklet.]

Air Transport Association of America. "Air Transport 1974." Washington, D.C.: N.p., 1974. [Booklet.]

Table 4
Growth--Total United States'
Domestic Trunk Airlines

Year	Available seat miles (hundred thousands)	Annual rate of growth (%)	Revenue passenger miles (hundred thousands)	Annual rate of growth (%)	Total passenger revenues (hundred thousands of dollars)	Annual rate of growth (%)
1926			1.3			
1927			1.9	49.8		
1928			10.5	452.5		
1929			35.1	233.9		
1930			84.0	139.1		
1931			106.4	26.7		
1932	300.0		127.0	19.4		
1933	370.1	23.4	173.5	36.6		
1934	362.5	(2.1) ^a	187.9	8.3		
1935	572.5	57.9	279.4	48.7		
1936	680.7	18.9	388.2	39.0		
1937	828.2	21.7	407.3	4.9		
1938	944.7	14.1	475.6	16.8	24.3	
1939	1,209.6	28.0	679.8	42.9	34.5	42.0
1940	1,809.4	49.6	1,047.1	54.0	52.7	52.8
1941	2,330.6	28.8	1,377.2	31.5	69.0	30.9

Table 4 (continued)

Year	Available seat miles (hundred thousands)	Annual rate of growth (%)	Revenue passenger miles (hundred thousands)	Annual rate of growth (%)	Total passenger revenues (hundred thousands of dollars)	Annual rate of growth (%)
1942	1,949.7	(16.3)	1,405.8	2.1	73.7	6.8
1943	1,838.5	(5.7)	1,617.1	15.0	86.0	16.7
1944	2,418.1	31.5	2,161.0	33.6	115.0	33.7
1945	3,784.5	56.5	3,336.3	54.4	164.4	43.0
1946	7,490.4	97.9	5,903.1	76.9	272.6	65.8
1947	9,152.4	22.2	6,016.3	1.9	303.2	11.2
1948	9,980.2	9.0	5,840.2	(2.9)	334.7	10.4
1949	11,117.7	11.4	6,570.7	12.5	378.1	13.0
1950	12,385.6	11.4	7,760.0	18.2	430.1	13.8
1951	14,672.0	18.5	10,210.7	31.5	570.3	32.6
1952	18,068.1	23.1	12,120.8	18.7	671.3	17.7
1953	22,114.8	22.4	14,297.6	18.0	775.8	15.6
1954	25,623.3	15.9	16,234.6	13.5	872.1	12.4
1955	29,978.6	17.0	19,205.7	18.3	1,021.1	17.1
1956	33,752.6	12.6	21,643.1	12.7	1,142.2	11.9
1957	39,838.2	18.0	24,499.5	13.2	1,287.2	12.7
1958	40,695.0	2.2	24,435.7	(0.3)	1,363.0	5.9
1959	45,793.2	12.5	28,127.2	15.1	1,632.6	19.8

Table 4 (continued)

Year	Available seat miles (hundred thousands)	Annual rate of growth (%)	Revenue passenger miles (hundred thousands)	Annual rate of growth (%)	Total passenger revenues (hundred thousands of dollars)	Annual rate of growth (%)
1960	49,153.3	7.3	29,233.2	3.9	1,756.4	7.9
1961	52,525.0	6.9	29,534.8	1.0	1,826.8	4.0
1962	59,736.8	13.7	31,827.8	7.8	2,021.0	10.6
1963	67,601.3	13.2	36,383.8	14.3	2,208.4	9.3
1964	75,242.4	11.3	41,658.4	14.5	2,504.9	13.4
1965	88,731.2	17.9	48,987.0	17.6	2,908.0	16.1
1966	97,174.7	9.5	56,802.8	16.0	3,233.1	11.2
1967	124,141.6	27.8	70,990.1	25.0	3,901.5	20.7
1968	153,864.6	23.9	81,611.8	15.0	4,451.3	14.1
1969	178,646.7	16.1	89,184.6	9.3	5,087.5	14.3
1970	182,780.3	2.3	89,410.3	0.3	5,263.6	3.5
1971 ^b	202,509.5	10.8	97,756.1	9.3	6,750.4	28.2
1972 ^b	206,617.9	2.0	108,190.0	10.7	7,510.5	11.3
1973 ^b	222,446.6	7.7	115,352.2	6.6	8,382.4	11.6
1974 ^b	210,997.1	(5.1)	117,616.3	2.0	8,510.2	1.5

^aParentheses indicate a deficit.

^bIncludes statistics for Alaska and Hawaii.

Table 4 (continued)

Sources:

Civil Aeronautics Board. "Handbook of Airline Statistics,"
1971 Edition. Washington, D.C.: N.p., 1971. [Booklet.]

Air Transport Association of America. "Air Transport 1974."
Washington, D.C.: N.p., 1974. [Booklet.]

statement because of the costs involved not only in the initial purchase of the airplane, but also the costs associated with the complementary equipment and in introducing the aircraft into service.

In the crisis era growth began to slow and fluctuate. Economists have recently begun to talk of the airlines as a maturing industry because of the dramatic decrease in their rate of growth. Operating profits during this era again fluctuated widely for the same reasons as in the previous period.

Chapter 6

CORRELATION OF EDUCATION-EXPERIENCE, NEEDS, AND SUCCESS

On the previous pages the education and experience of various presidents of the airlines, the needs of the airline industry by era, and the success of the industry during the past fifty years have been analyzed. In relating these three factors one should note that it is assumed that a president's influence in the operation of his company was predominant and, therefore, his education and experience were largely responsible for the orientation of the airline company. This is a realistic assumption in that the president of an airline is usually also the chief operating officer and makes the necessary day-to-day decisions affecting the company. Many of the presidents of the airlines were autocrats and literally made all the decisions affecting their companies. This was especially true of the early presidents.

In this light the following will be considered: Did management have the education and experience to meet the needs of the airline industry in each era? To what degree was the success of the industry dependent upon the occupational qualifications of management as reflected in the industry's presidents? What correlation exists, if any, between the needs of the industry, the success of the industry, and the education and experience of the presidents of the

industry?

While most of the early dominant presidents in the airline industry have backgrounds which fit into the category of general business experience, at least seven out of the ten have had flying experience. These include C. R. Smith of American Airlines, Robert F. Six of Continental Airlines, Eddie Rickenbacker of Eastern Airlines, George T. Baker of National Airlines, Croil Hunter of Northwest Airlines, Juan Trippe of Pan American Airways, and Jack Frye of Trans World Airlines. Some of these presidents have flown professionally and extensively while others have flown only as barnstormers before beginning their career with the airlines; four of these pioneers have primarily operational backgrounds: Robert F. Six, George T. Baker, Juan Trippe, and Jack Frye.

As mentioned earlier, the needs of this early era were operational in nature. It was a constant challenge just to keep the airplanes operating, much less on a regular schedule. Little effort was given during this period to stimulating passenger traffic or financial matters. There was, however, much attention given to new mail contracts as this provided additional income.

The success during the early years of commercial aviation was in the mere existence of the airlines and the industry. Some carriers were fortunate enough to win new routes which allowed for expansion of their operations, however until 1938 the industry grew very little.

It is evident that there appears to be a very strong correlation during the early years of the airline industry between

management's experience, as exemplified by the presidents of the companies, and the needs of the industry. The majority of the presidents considered had some flying experience and almost half had operational backgrounds. The primary need of the era was of an operational nature, which management was well qualified to handle. The industry was very successful during this era too, recognizing its existence through a period of adversity. The success can be largely attributed to the ability of management to meet the needs of the industry, so there is a strong correlation here also.

As in the early era, a majority of the "growth era" presidents of the airlines fit into the broad general business background category. Of the remainder a wide diversity of backgrounds are represented: military, operational, legal, and marketing. However, examining the background of these presidents more carefully, there appear to be several with experience in the marketing area of business. Thomas Braniff of Braniff Airways was an insurance salesman, Robert F. Six of Continental Airlines was the circulation manager for a newspaper, Eddie Rickenbacker of Eastern Airlines was a director of sales for an aircraft manufacturer, LaMotte T. Cohu of Trans World Airlines was a security salesman, and Charles E. Beard of Braniff Airways (Thomas Braniff's successor) had a background predominantly in the marketing area.

The needs of the growth years were primarily those of an organizational nature. The fantastic growth in air transportation which occurred after the war and the competition between carriers for

the first time required organization for the preservation of the industry and continued orderly growth.

The success of this era, as mentioned above, was mixed. If growth is the sole measure of success then the airline industry was tremendously successful. However, if operating profits are considered this position must be moderated. During this period the airlines faced several crises which were reflected on the income statement--three economic recessions and the first major reequipment cycle of the industry. Considering both growth and operating profit, the industry fared well but by no means achieved the heights industry proponents and investors of the era predicted.

Taking all of the above into account, there appears to be some correlation between the management, needs and success of the industry during the growth era, but not nearly as defined as in the early years. Management was diversified in their backgrounds, although there was a definite emphasis in the sales and marketing area. The major need of the era was organization to deal with the explosive growth of the industry and the competition between carriers. Those presidents with some experience in the sales and marketing area were certainly better equipped to deal with the growth and competition of the era than those with no such experience. As for organizational skills, the background information available is inconclusive. Broad business experience is probably most helpful in teaching organizational skills, rather than experience in any one particular area of business. As was pointed out, the majority of the presidents of this

era had broad business exposure.

Success during this era was mixed and depended much on external factors and management's ability to deal with them. There appears, therefore, to be some correlation between the success of the industry and management's ability to meet the needs of the industry.

Approximately half of the presidents during the crisis era had a broad business background while the remainder had a wide variety of backgrounds. There does not appear to be any pattern among management's experience during this era as in the previous era. Particularly noteworthy is the fact that no president had either a strictly financial background or even a strong experience in finance.

The needs of the crisis era, however, are mainly in the financial area of business as huge quantities of capital were necessary to refurbish fleets and facilities for the jet age. It appears, therefore, that a negative correlation exists between management's background and the needs of this era.

The negative correlation is reflected in the success of the industry. The operating profits during the crisis years fluctuated even more widely than during the growth era. The industry went from one extreme to the other during this era--record profits were set and extremely adverse results were achieved. Undoubtedly, the fact that management lacked the necessary background to meet the predominant needs of the industry during this era contributed largely to the irregular profit pattern of the industry. Certainly the economic climate played a major role in the operating results too, as in the

previous era. Growth during this era was irregular and fluctuated in rate, although there was no negative growth.

Chapter 7

CURRENT PROBLEMS OF THE AIRLINE INDUSTRY

The current situation in the airline industry is not favorable. Both business and pleasure air travel have declined recently as real personal disposable income decreased, air fares rose, unemployment rose, and the chief economic indicators further deteriorated. The industry earned 247 million dollars during 1974, 48 percent ahead of 1973, because of a number of factors: Good domestic traffic most of the year resulting from the gasoline shortage scare, multiple fare increases, and a contraction in capacity necessitated by the allocation of fuel.¹

During the first quarter of 1975 the airline industry performed poorly and this trend is predicted by many to continue throughout most of the year because of the sluggish economy. However, anti-recession measures now being effected by the government should bring about a more favorable climate for the airline industry after mid-year that could be reflected in domestic traffic before fourth quarter.

With real disposable personal income, considered by many to be the most powerful influence on pleasure travel, likely to enter an

¹Standard and Poor, "Industry Surveys--Air Transport," April 17, 1975, p. 63. [Pamphlet.]

uptrend early in the second half of 1975, and the sharp drop in corporate profits likely to ameliorate, there should be some positive forces at work that could considerably strengthen prospects as the industry moves into 1976.²

New discount fares are hoped to generate a considerable amount of new traffic yet this year. Further, another domestic fare increase may be fully justified, under Civil Aeronautics Board standards for considering increases, by mid-1975.

Fuel, which nearly doubled in prices during 1974, will undoubtedly continue to climb in price, however, at a much smaller rate than during 1974. This is assuming that sharp increases in traffic and taxes can be avoided and another mid-East confrontation can be averted. It is important to note that fuel is still being allocated to the airlines and will probably continue to be a scarcity for the indefinite future. This may result in long-term growth being constrained.

Growth in terms of capacity during the near future will continue as the industry continues to take delivery of additional wide-body jet aircraft ordered several years ago. As new aircraft deliveries taper off capital outlays will decline. Commitments for new equipment during 1975 are forecast at the one billion dollar level, down from the 1.4 billion dollars spent during 1974. Capital expenditures should further decline during 1976.³

²Ibid., p. 64.

³Ibid., p. 65.

As pointed out previously, the success of the airline industry closely parallels the domestic economy and the present time period is no exception. The economy is expected to improve in the second half of 1975 and further improve during 1976. It is very likely that airline industry profits and growth will follow this trend.

Chapter 8

CURRENT NEEDS OF THE AIRLINE INDUSTRY

The key to healthy profits in the airline business is a high load factor combined with a low break-even point. The cost structure of the airlines is such that fixed costs are high and many of the variable costs are noncontrollable. The airlines have huge capital investments and no control over such costs as fuel and the effects of inflation. Therefore, the major emphasis of the industry should be not on decreasing the break-even point, but rather on raising load factors to compensate for the increased costs of operations.

There are two approaches for an airline company to raise load factors in a competitive market. First, an airline can attempt to "steal" passengers from competition by aggressive marketing programs or offering special bargains; second, an airline company can attempt to stimulate total industry demand for air travel and be content with its fair share of the new business stimulated. Unfortunately, most carriers today have opted for the first alternative.

Some airlines have been very successful in their efforts to "steal" passengers from competition to the competitor's detriment. The classic modern example is National Airlines with the "Fly Me" campaign. On the New York City to Miami route, over which National competes with Eastern Airlines and Delta Air Lines, National succeeded in taking away 40 percent of Eastern's business and 20 percent

of Delta's business. National's profits soared to new records last year, largely because of its success against competition, while Eastern's profits dipped to new lows. Eastern had many problems last year, but National's success played a major role in its gigantic loss.

It is evident that by increasing industry demand the whole industry benefits. Traffic on all carriers increases and helps all carriers to combat the increase in costs.

Another technique the industry has to combat the rise in costs is to increase prices of air travel, as was done on three occasions during 1974. However, there is a strong indication that demand for air travel is very elastic and that as prices go up, demand goes down. It then becomes a question of at what fare level are revenues maximized. After reaching the point of maximization, increasing fares will decrease total revenues because less people will fly.

The airline industry has very few operational problems at this point in time due to recent technological advances, the state of the art, and no recent new aircraft introductions. With the decline for new equipment, the requirements for external financing will drop substantially in the next few years. Under favorable conditions, however, some equity financing may be undertaken to improve the unfavorable debt/equity ratios of the industry.

In summary, the primary need of the airline industry today, and the need for the remainder of this decade, will be to increase load factors at a pace equal to or exceeding the increase in the

break-even point. This appears to be the most effective weapon the industry has against the increases in operating costs, which are presently causing and will continue to cause profits to deteriorate.

Chapter 9

EDUCATION AND EXPERIENCE OF SELECTED CURRENT AIRLINE COMPANY PRESIDENTS

Since the basic need of the airline industry at the present and in the future is for an increased growth rate in passenger travel, one would expect the majority of the current airline presidents to have marketing backgrounds in order to achieve the needed increase in demand. However, such is not the case.

Out of the ten airlines considered, four have presidents with operational backgrounds: Robert F. Six of Continental Airlines; David C. Garrett, Jr., of Delta Air Lines; Floyd D. Hall of Eastern Airlines; and William T. Seawell of Pan American World Airways. Further, L. B. Maytag of National Airlines and F. C. Wiser, Jr., of Trans World Airlines have some operational experience. Mr. Maytag is currently licensed to pilot all of the various types of aircraft his company operates.

Albert V. Casey of American Airlines is the only airline president to currently have a financial background, although C. Edward Acker of Braniff Airways has considerable financial experience. It would almost be expected that there would be more finance-experienced chief executives at this point in time since financial needs were the primary need of the industry during the past fifteen years.

Only United Airline's new president, Richard J. Ferris, has

had any substantial marketing background. Previous to his new position, he was ground vice president of marketing services at United. However, the rest of his background is so varied that he is classified as having a general business background.

David C. Garrett, Jr., worked in the marketing division of Delta as the first job of his career, but because of the limited responsibility and the length of time ago his marketing experience is considered minimal.

Donald W. Nyrop of Northwest Airlines was formerly a chairman of the Civil Aeronautics Board and as such has had considerable experience in dealing with passenger growth, however, he has no direct marketing experience. As pointed out previously, Robert F. Six was a circulation manager for a newspaper company many many years ago.

Chapter 10

CORRELATION OF CURRENT NEEDS, PROBLEMS, AND PRESIDENTS' EDUCATION-EXPERIENCE

Again, as in the crisis era, there appears to be little correlation between the needs of the airline industry and the backgrounds of the airline company presidents. A marketing background would seem necessary to best develop industry sales, however, only one president has any substantial marketing background.

As for the success of the industry, it seems to be following the pattern set by the economy. When the economy is booming, so are airline profits and when the economic situation is deteriorating, as at present, airline profits are down. However, it appears that management's skills and experience do play a major factor in the success of the airline, especially in those periods of economic adversity.

At the present time, a period of economic adversity, five of the ten airlines studied made a profit first quarter while five lost money. They all faced the same economic situation so management must be one of the factors that made half of them successful and half of them unsuccessful. A carrier's route structure is another factor. Those airlines with major routes to tourist centers suffer adverse economic consequences more than those carriers with routes primarily between trade centers.

There appears to be no correlation between the success of the industry and management's ability to meet the needs of the industry. Operating results are mixed while in practically no case does management's background meet the needs of the industry. For example, National Airlines produced a 6.4 million dollar profit in the first quarter and its president, L. B. Maytag, has a general business background with a majority of his experience in operations.⁴

⁴"First Quarter Profit Survey," Business Week, May 19, 1975, p. 70.

Chapter 11

VALIDITY OF RESEARCH

As pointed out at the beginning of this research, it has been assumed that the president of an airline sets the direction his company takes and is the overwhelming influence on policy and major decisions. An assumption of this nature was necessary to make the correlation analysis of this research. If the data of all the top management of the ten airlines studied were included, it would have grown to such proportions that any meaningful analysis would have been impossible. However, this does not make the assumption correct.

As is true in all human nature, there are those individuals who are strong leaders and autocrats. On the other hand, there are also those individuals who are weaker and content to take a back seat. Unfortunately, it is impossible to differentiate between the two types of presidents in most cases because of a lack of information. This analysis would be much more meaningful if it could be determined which presidents' influence were truly reflected in the direction the companies went and which presidents only played a passive role in setting the direction their companies took.

It appears from the foregoing research that the economy plays a major role in the success of an airline company and the entire industry as a whole, and management, therefore, has only a limited amount of control over success. When the economy is booming it is

hard for an airline company not to make a profit, however, when there is a period of economic adversity the skills of management become manifest. It has largely been assumed throughout the foregoing analysis that the success of an airline is entirely dependent upon management's direction of the company (as exemplified by the president of the company).

Further, the effect of government regulation on the success of the airline industry has been considered only briefly because of the very subjective nature of the effect. It is evident today, however, that the massive regulation the industry must comply with cuts deeply into operating profits. For example, an airline is not permitted to terminate an unprofitable route without the consent of the Civil Aeronautics Board, which is very difficult and time consuming to obtain.

Because of these three factors, i.e., the assumption that a president is the major influence in the direction his company takes, that the economy plays only a minor role in the success of an airline, and the omission of the effects of regulation, the validity of this research is questionable. However, the area of concentration is so subjective that these assumptions were necessary to make any useful analysis.

The research definitely shows some trends in management, exemplified by the presidents in the industry, the needs of the industry, and management's qualifications to meet these needs. The research also points up the success of the industry; however, it fails

to show how much of the success or failures of the industry is attributable to management's ability to meet the needs of the industry. If the effects of the economy and government regulation could have been eliminated, then the determination of how management's ability to meet the needs of the industry and how it effects the success of the industry could have been made with a significant degree of validity.

Chapter 12

COMPARISON OF CURRENT-HISTORICAL SITUATION;

FORECAST FOR MANAGEMENT; CONCLUSION

Looking to the future, growth will be a major factor. The reequipment cycle begun with the introduction of wide-body aircraft has almost been completed and the only problem facing the airlines in the immediate future is how to fill up all those empty seats. In that increasing passenger loads is the major need of the immediate future, a marketing-oriented management appears the most desirable.

The airline industry is beginning to face a period of time similar to the growth period which occurred after World War II. To survive and prosper traffic must increase now that capacity has increased, and expenses along with it. After the War when the first major reequipment cycle of the industry occurred, management was faced with the problem of how to fill up the new and larger aircraft with passengers, in order to pay for the aircraft. This is precisely the situation at the present time; the industry has a lot of new expensive larger aircraft that are not paid for yet; and unless traffic increases, they will not be able to pay for them.

Of course, many aircraft today are leased, but leasing costs are high. An airline that cannot keep a leased aircraft full of passengers cannot prosper either.

Looking toward the 1980s, there is a likelihood that another

reequipment cycle will occur out of necessity to preserve the aircraft manufacturing industry. New aircraft have always been more elaborate and more expensive than their predecessors. Therefore, the airlines will once again have a financing problem, similar to the crisis era of the 1960s. At this point, a finance-oriented management will become desirable as new means will be required to finance the new purchases.

It appears that the airline industry is headed for a continuous series of crisis eras and growth eras, which will be triggered by impending new-type aircraft introductions. The impending introduction will trigger the crisis era and the growth era will follow as the airlines slowly recover from the financial crisis and begin to stimulate new passenger growth. The situation probably will not be as clear-cut as it would seem because the state of the economy will undoubtedly complicate things. However, the cycle will be very distinct.

Management in the future will, therefore, need to follow the particular needs of the era--financial background for the crisis eras and marketing backgrounds for the growth eras.

It appears that this cycle of crisis and growth may have been continuing in the airline industry since World War II but for a number of reasons it has not been made manifest.

After World War II there was plenty of capital available to the airlines so a crisis era did not really occur when the reequipment cycle began. However, the growth era did manifest itself. The next

new aircraft introduction, the beginning of the jet age, did trigger a crisis era because capital was not readily available.

A growth period did occur during the late 1960s as is evident in Table 4, however, it was short-lived. At the beginning of the 1970s another new aircraft introduction, the wide-body jets, precipitated another crisis era. Had the economy been booming during the late 1960s the growth period would have been more pronounced.

At the present time the airlines are recovering from the wide-body jet introductions and will undoubtedly seek to stimulate passenger traffic in the near future, beginning a growth period. The growth period may have already begun in that new discount fares and advertising campaigns have occurred already during 1975. However, the effects of the efforts of the industry are being obscured by the adverse economic climate.

The industry may already have begun to react to this growth period in that its newest president, Richard J. Ferris of United Airlines, has a strong marketing background. Perhaps this is the direction that management will take during the remainder of the 1970s and on into the 1980s until another major reequipment cycle occurs.

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